



SEONZ

SPORT & EXERCISE SCIENCE

— NEW ZEALAND —

ABSTRACTS FROM THE 2018 ANNUAL CONFERENCE

26th-27th October 2018

University of Otago,
Dunedin, New Zealand

Day Two: Saturday 27 th October (Hutton Theatre)			
10:20	Post-training hot water immersion for team-sport athletes: effects on concurrent training load and treadmill running in the heat. <i>Josh Stewart</i>	Identifying shoulder injuries among New Zealand Cricket fast bowlers: a 12-month retrospective injury surveillance. <i>Sibi Walter</i>	Cognitive, emotional, and behavioural factors associated with tapering. <i>Maxwell Stone</i>
10:40-11:10	Morning Tea		
Parallel Sessions	Hutton (Exercise Physiology)	Tekapo (Physical Activity)	Barclay (Motor learning)
11:15	The relationship between physiological and psychophysical function throughout heat acclimation. <i>Jamie Prout</i>	School bag weight as a barrier to active transport to school among New Zealand adolescents. <i>Sandra Mandic</i>	Motor learning by analogy: effects of visual-verbal preference. <i>Tina van Duijn</i>
11:30	Effects of hypohydration and the menstrual cycle on pain perception. <i>Beverley Tan</i>	Understanding rural adolescents' perceptions of walking versus cycling to school. <i>Jessica Calverley</i>	The effect of unilateral hand contractions on cognitive inhibition. <i>Merel Hoskens</i>
11:45	Female CrossFit members experience irregular menstrual cycle. <i>Katie Schofield</i>	The economic role of the accredited/clinical exercise physiologist within the New Zealand allied health field. <i>Amy Pearce</i>	Motor movement recall: analogies are more memorable than explicit rules. <i>Liis Uiga</i>
12:00-13:30	Lunch (AGM)		
13:30-14:00	Invited Speaker: Professor Glenn McConell , Institute for Health and Sport (IHES), Victoria University, Australia.		
14:00-14:20	New Strength and Conditioning Accreditation Programme for NZ. <i>Presentation by SESNZ</i>		
14:30-15:00	Afternoon Tea		
15:00-15:30	Keynote Speaker: Associate Professor Debra Waters , Director of Gerontology Research, University of Otago		
15:30-15:45	Chronic cardiovascular effects of whole-body vibration training in the elderly. <i>Sally Lark</i>		
15:45-16:00	Promoting safer landing by older adults who fall unexpectedly. <i>Rich Masters</i>		
16:00-16:30	Closing		

42. Understanding Rural Adolescents' Perceptions of Walking versus Cycling to School

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Introduction: Although active transport to school has been extensively studied in urban settings, active transport perceptions among rural adolescents remain unknown. This study compared perceptions of walking versus cycling to school among rural adolescents in New Zealand. **Methods:** Adolescents (n=440; age: 13-18 years; 10 schools) from rural Otago living ≤ 4.8 km from school completed a questionnaire about school travel and perceptions of walking and cycling to school. Data were analysed using t-test and Chi-square tests. **Results:** Overall, 45% of adolescents walked and 17% cycled to school regularly. Most adolescents believed that both modes were great ways to get exercise. Compared to cycling, adolescents perceived walking to school as safer (92.6% vs 81.6%) and more pleasant (60.8% vs 47.5%), had less logistic-related barriers, offered better opportunity to socialise (57.1% vs 26.4%), received greater peer/parental/school support and had better infrastructure (85.1% vs 42.7%) (all $p < 0.001$). In contrast, adolescents perceived trip duration, distance, feeling tired and cold/wet weather as greater barriers for walking versus cycling to school (all $p < 0.001$). **Discussion:** Rural adolescents perceived that walking to school was safer, with greater social and infrastructure support compared to cycling. Therefore, different approaches are required to promote walking versus cycling to school in rural settings.

43. The Economic Role of the Accredited/Clinical Exercise Physiologist within the New Zealand Allied Health Field

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Mortality rate of NCD in NZ is 89% of all deaths. Healthcare cost per person in NZ is \$4018 per person in 2014 with a gross national income average of \$30750. This is 11% of the GDP. In 2012 that was only \$3721 pp per year. In 2012 NZ had the 2nd highest proportion of obesity in the world at 26.5% with the US being number one at 33.8%. NZ has the second lowest rate of knee replacements at 102/100000 and hip replacements at 149/100000 with Germany topping the list at 213/100000 and 296/100000 respectively, this could be due to the positive effect physios have had or that in general the DHB's try to avoid the surgeries? According to the WHO New Zealanders mortality rate for raised blood pressure is 21.6% and obesity 28.3%. In 2006, New Zealanders sustained health losses totalling almost one million years of healthy life (955,000 DALYs). Just over half (51%) of this total health loss resulted from fatal outcomes, with non-fatal outcomes accounting for 49%. Adjusting for age and population size, health loss in Māori was almost 1.8 times higher than in non-Māori, with more than half of Māori health loss occurring before middle age. If Māori had experienced similar rates of health loss to non-Māori at all ages, health loss among Māori would have been 42% less and that of the whole population 7% less. Total DALYs lost are projected to increase from 955,000 in 2006 to 1.085 million in 2016, a rise of 13.4%. This assumes a continuation of recent demographic trends (population growth and ageing) and epidemiological trends (disease and injury incidence and mortality). Projected increases in population size and ageing explain 80% of this trend, with epidemiological changes explaining the remaining 20%.